

In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Currently amended) A system comprising:
 - one or more transmission mediums for carrying at least upstream and downstream digital data traffic;
 - a headend circuit coupled to all said transmission mediums and containing or coupled to one or more server computers and/or other circuits to provide at least digital data services to a plurality of customers;
 - one or more local area networks and/or dedicated LAN segments or data paths at each customer premises;
 - one or more peripheral devices at each customer premises coupled to said one or more local area networks and/or dedicated LAN segments or dedicated data paths, said one or more peripheral devices including a non-television component;
 - a plurality of gateway means at customer premises locations and coupled to all said transmission mediums and coupled to said one or more local area networks, for receiving, demodulating and detecting digital data transmitted to one or more of said peripherals from said headend circuit and to packetize and route said data to the appropriate peripheral device via said one or more local area networks or one or more ports directly connected by dedicated lines or LAN segments to one or more peripherals, and for managing traffic and bandwidth and rate shaping if necessary to match the data rate of data to be transmitted over a data path to the available bandwidth on that data path; and
 - a remote control means at one or more customer premises and, at each premises, coupled by wireless digital data communication circuitry to said gateway or to said gateway through a peripheral device, for issuing commands to said headend circuit through said gateway and one or more transmission mediums to provide data to said one or more peripherals through said one or more transmission mediums and said gateway.

2. (Original) The apparatus of claim 1 wherein said wireless digital data communication circuitry is a digital data transceiver and wherein said remote control means includes a display and audio data playing circuitry and further includes means for decompressing compressed video and/or audio data received by said transceiver and displaying the decompressed video image data and for playing decompressed audio data, and further comprising means for receiving and displaying internet protocol packet data defining web pages, graphics, e-mail and other data that is received from the internet.

3. (Currently amended) A system comprising:

one or more transmission mediums for carrying at least upstream and downstream digital data traffic;

a headend circuit coupled to all said transmission mediums and containing or coupled to one or more server computers and/or other circuits to provide at least digital data services to a plurality of customers, and including rate shaping circuitry to alter the data rate of data transmitted on or received from said transmission mediums;

one or more local area networks or digital data buses at each customer premises;

one or more peripheral devices including at least one non-television component at each customer premises coupled to said one or more local area networks or buses;

at least one cable modem at each customer premises location, said cable modem coupled to all said transmission mediums and coupled to said one or more peripherals via said local area networks or buses; and

a remote control coupled to said headend through said cable modem or coupled to said headend through one or more of said peripherals coupled to said cable modem for issuing wireless commands that get routed by said cable modem to said headend to invoke services provided by said headend circuit.

4. (Original) The apparatus of claim 3 wherein said cable modem includes rate shaping circuitry to modify the data rate of data transmitted on said one or more local area networks, and wherein said remote control each includes a transceiver for receiving infrared or radio frequency transmissions of digital internet protocol packet data and/or compressed video and/or audio data and decompression/conversion circuitry for decompressing any compressed video and/or audio

data and converting said decompressed video and/or audio data and internet protocol packet data to signals or data that can be displayed and/or played and display circuitry for displaying said converted internet protocol packet data and/or converted decompressed video data and includes a speaker and/or headphone jack for playing and/or outputting analog sound data.

5. (Currently amended) A system comprising:

a satellite dish for receiving downstream digital video data traffic at each customer premises location;

a conventional telephone line at each customer premises location and routed to a central office headend, for carrying low speed internet protocol digital data traffic both upstream and downstream;

a digital video headend circuit coupled to one or more video and/or other servers to transmit digital video and other data implementing one or more services to one or more satellites for retransmission to the satellite dishes at each customer premises location;

a central office headend server coupled to each of said telephone lines for implementing the bidirectional transmission of internet protocol data packets to and from said customer premises and servers on the internet;

one or more local area networks at each customer premises;

one or more peripheral devices including at least one non-television component at each customer premises coupled to said one or more local area networks;

a plurality of gateways, at least one at each customer premises locations, each gateway coupled to a satellite dish and to a conventional telephone line and coupled to said one or more local area networks and functioning to extract digital video and other data transmitted to one or more of said peripherals from said digital video headend and/or said central office headend server and to route said data to the appropriate peripheral device via said one or more local area networks; and

a remote control means at each customer premises coupled by wireless digital data communication circuitry to said gateway or to said gateway through a peripheral device, for issuing commands to said digital video headend circuit and to said central office headend server through said gateway and one or more conventional telephone lines to provide data to said one or

more peripherals through said satellite dish and/or a conventional telephone line and said gateway and local area network.

6. (Currently amended) A system comprising:

a satellite dish for receiving downstream digital video data traffic at each customer premises location;

a cable television hybrid fiber coaxial cable network (hereafter HFC network) for carrying analog television broadcast signals and high speed internet protocol digital data traffic both upstream and downstream;

a digital video headend circuit coupled to one or more video and/or other servers to transmit digital video and other data implementing one or more services to one or more satellites for retransmission to the satellite dishes at each customer premises location;

a cable television headend circuit coupled to each of servers for implementing the bidirectional transmission of data packets to and from said customer premises and servers on the internet and for implementing bidirectional transmission of data packets from said servers to said customer premises implementing other services;

one or more local area networks at each customer premises;

one or more peripheral devices including at least one non-television component at each customer premises coupled to said one or more local area networks;

a plurality of gateways, at least one at each customer premises locations, each gateway coupled to a satellite dish and having a cable modem included therein to couple said gateway to said HFC network and coupled to said one or more local area networks and functioning to extract digital video and other data transmitted to one or more of said peripherals from said digital video headend circuit and/or said cable television headend circuit and to route said data in the appropriate format to the appropriate peripheral device via said one or more local area networks; and

a remote control means at each customer premises coupled by wireless digital data communication circuitry to said gateway or to said gateway through a peripheral device, for issuing commands to said cable television headend circuit through said gateway and said HFC network to provide data to said one or more peripherals through said HFC network and said gateway and local area network.

7. (Original) The system of figure 6 wherein said gateway has a conventional modem therein which interfaces said gateway to said digital video headend circuit through said remote control means and a telephone line circuit of the public service telephone network for purposes of ordering pay-per-view events for viewing on one or more of said peripherals.

8. (Currently amended) A system comprising:

a plurality of satellite dishes for receiving downstream digital video data traffic, each satellite dish at a customer premises;

a digital video headend circuit coupled to one or more video servers for transmitting digital video broadcast data to said plurality of satellite dishes via an uplink, a satellite and a downlink;

a plurality of conventional telephone lines, each routed to a customer premises and each for carrying low speed internet protocol digital data traffic both upstream and downstream;

a plurality of gateway means, each at a customer premises and coupled to at least one of said telephone lines and at least one of said satellite dishes;

a central office server coupled to the internet and to said conventional telephone lines to provide bidirectional internet protocol data transfers between each said gateway and servers on the internet via a conventional telephone line;

one or more conventional analog televisions at each customer premises coupled to said gateway via audio and video lines;

one or more non-television components at each customer premises coupled to said gateway by way of a local area network;

a remote control at each customer premises, and coupled by wireless digital data communication circuitry to said gateway or to said gateway through a peripheral device, for at least sending data and commands to said central office internet server through said gateway and a conventional telephone line to cause bidirectional data transfers between said gateway and said internet server;

each said gateway means for receiving compressed digital video broadcast data and for wireless receiving commands from said remote control, and for coordinating use of said remote control and said conventional analog television like a computer keyboard and display,

respectively, for sending and receiving internet protocol data over a conventional telephone line so as to enable use of said television and remote control and gateway like a personal computer to display web pages and/or e-mail, and for routing said compressed digital video data to a hard disk for recording or to a decompression and conversion circuit for processing for display on said television(s) or both.

9. (Original) The apparatus of claim 8 wherein said remote control includes a display and a transceiver to receive compressed digital video broadcast data and decompression and conversion circuitry to buffer frames of said data and decompress said compressed digital video data and convert it to YUV or other format uncompressed video data that can be displayed on said display.